

Pat

Notice of Allowability

Application No.

10/767,793

Examiner

Dmitry Suhol

Applicant(s)

LEE ET AL.

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to after final amendment filed 7/21/05.
2. ☒ The allowed claim(s) is/are 1-4,6-9,11-14,16-18,20-25,31 and 35-40.
3. ☒ The drawings filed on 29 January 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

D. Suhol
D. Suhol

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The specific limitations of (with respect to claim 1) "...a matrix securely holding said tooth in a fixed position in said support structure cavity; and wherein at least a portion of said matrix in the region of a tip of said root is an electrically conductive medium selected to impart an impedance that approximates an impedance associated with normal human tissue surrounding a root of a live tooth", (with respect to claim 13) "...a matrix securing said tooth in said socket; at least a first component of said matrix surrounding an apex of said tooth root being sufficiently electrically conductive so as to simulate the electrical conductance in human tissue surrounding a live tooth", (with respect to claim 25) "...a manikin having at least one jaw that simulates a human jaw; said jaw having at least one tooth that has said jaw molded thereabout and being located whereat a human tooth would be located in a live human jaw; said tooth being operably positioned such that a crown of said tooth extends outward from said jaw and a root of said tooth is located in said jaw; and a matrix having a first component surrounding an apex of said tooth root and being sufficiently electrically conductive so as to simulate the electrical conductance in human tissue surrounding a live tooth; said matrix first component being adapted to be operably conductively connected to such an apical position locator", (with respect to claim 35) "...a matrix securely holding said tooth in a fixed position in said support structure cavity; a sleeve operably snugly received in said socket; said tooth and said matrix being located within said sleeve; and at least a portion of said matrix in the region of a tip of said root is an electrically conductive medium selected to impart an

impedance that approximates an impedance associated with normal human tissue surrounding a root of live tooth", (with respect to claim 36) "...matrix securely holding said tooth in a fixed position in said support structure cavity; at least a portion of said matrix in the region of a tip of said root is an electrically conductive medium selected to impart an impedance that approximates an impedance associated with normal root of a live tooth; a first highly human tissue surrounding a said conductive medium is conductive matrix component that is located only in the vicinity of said root and a remainder of said cavity is filled with a second matrix component that is less electrically conductive than said first component; and a root sleeve sized and shaped to surround said first component and a tooth root apex, so as to hold said first component in position", (with respect to claim 37) "...a matrix securing said tooth said socket; least a first component of said matrix surrounding an apex of said tooth root being sufficiently electrically conductive so as to simulate the electrical conductance in human tissue surrounding a live tooth; and a matrix sleeve adapted to be snugly received in said socket and to receive said matrix and tooth within", (with respect to claim 38) "...a matrix securing said tooth in said socket; at least a first component of said matrix surrounding an apex of said tooth root being sufficiently electrically conductive so as to simulate the electrical conductance a live tooth; human tissue surrounding said first component is located only close proximity to an apex of the tooth root; and a tooth root sleeve sized and shaped to surround and protect said matrix first component and said tooth root apex during usage", (with respect to claim 39) "...a support structure having a generally planar support plate; a plurality of inserts wherein each insert fits modularly on

said support plate support structure and in abutting relationship to adjacent inserts; each insert mimics a portion of a human jaw; each insert provides structure thereon that allows a dental student to practice at least one dental procedure; one of said inserts provides training structures for conducting root canals; and said support includes an electrical conductor that is adapted to electrically contact said root canal insert so as to conduct electricity between a lower end of a root of a tooth and said conductor” and (with respect to claim 40) “...each of said inserts includes an inward facing and including a plate that operably overlaps each insert lip and securable to said support so as lock said inserts to said support” are not anticipated or made obvious over the prior art of record in the examiners opinion. For example, Walker discloses a dental training device which teaches a support structure (22), a tooth (16) having a root canal (34 and 36) and electrically conductive solution (27) which mimics the impedance associated with normal human tissue surrounding the root of a live tooth. Inoue (JP 05-027675) discloses a dental training aid which teaches that it is known to manufacture such training aids in the form of a manikin having a jaw (figure 1). Williams discloses a dental training aid which teaches that it is known to provide such aids with removable teeth that may teach a variety of dental procedures (figures 1-6 and col. 2, lines 30+).

However, prior art of record fails to teach or disclose a matrix which holds the tooth in a fixed position (in other words the saline solution of Walker does not and can not support the tooth in a fixed position since it is a liquid), inserts having an inward facing lip and a plate the operably overlaps each insert lip to lock the inserts to the support. Additionally, it would not have been obvious to insert the training aid of Walker into the jaw model of

Inoue since the jaw model of Inoue is not designed to receive the support structure of Walker.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Suhol whose telephone number is 571-272-4430. The examiner can normally be reached on Mon - Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "D. Suhol". The signature is fluid and cursive, with a large initial "D" and a stylized "Suhol".

Dmitry Suhol
Examiner
Art Unit 3725

ds

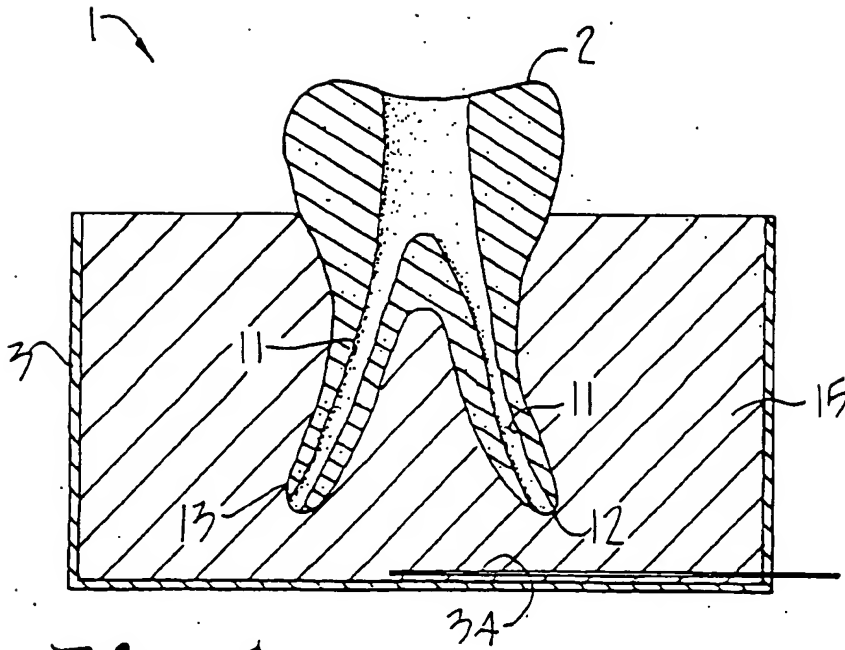


Fig. 1.

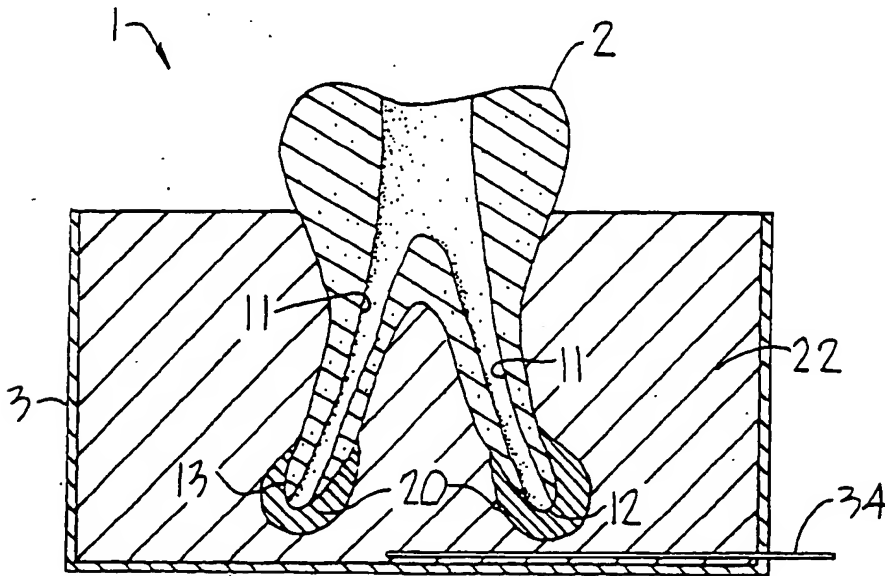


Fig. 2

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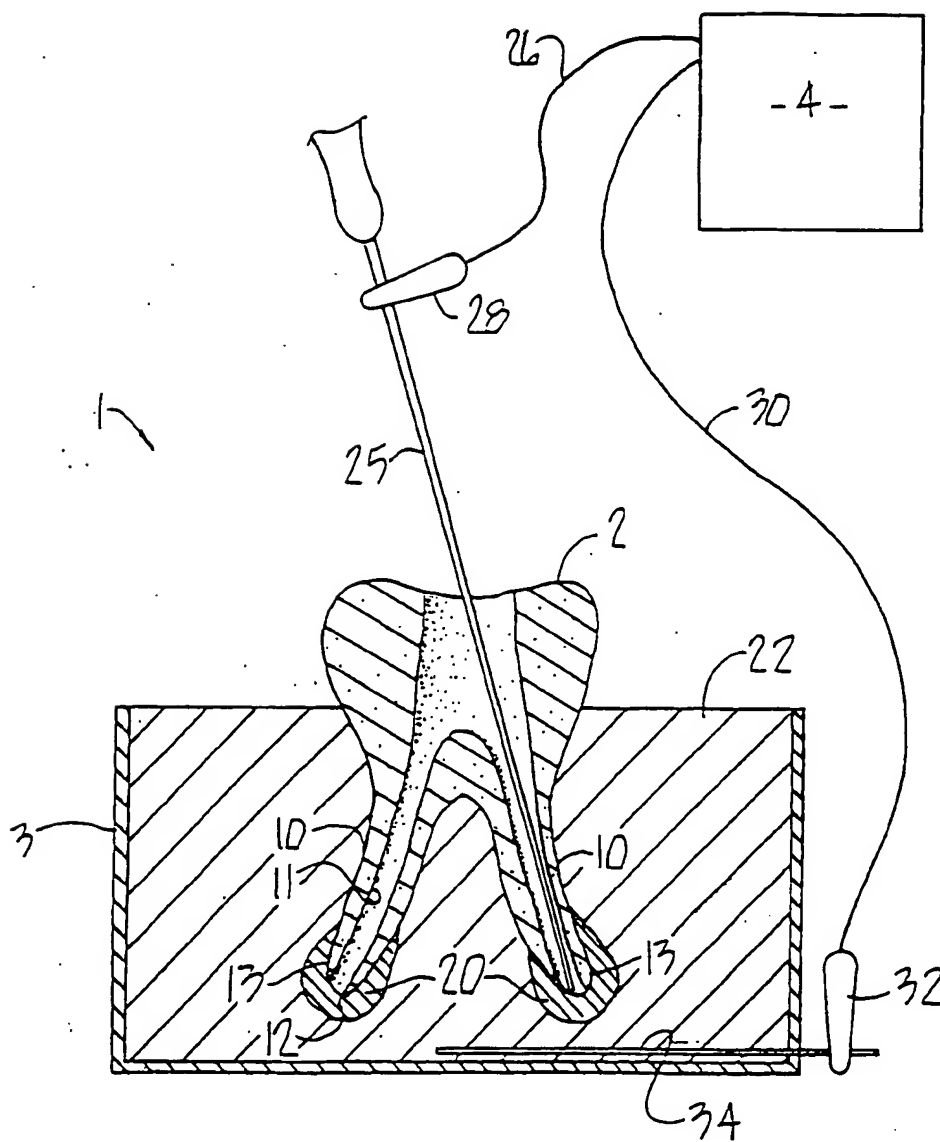


Fig. 3.

Fig. 4.

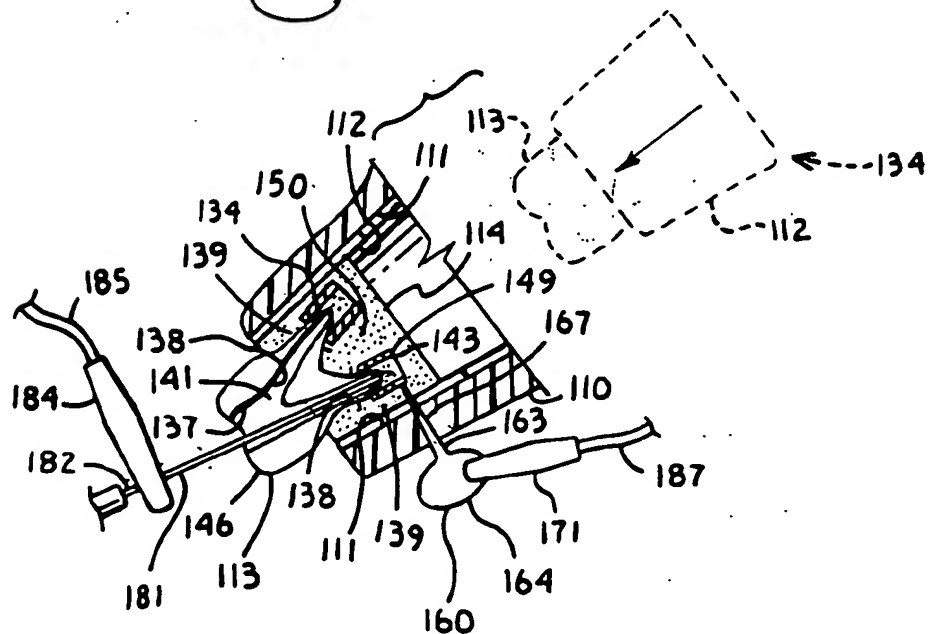
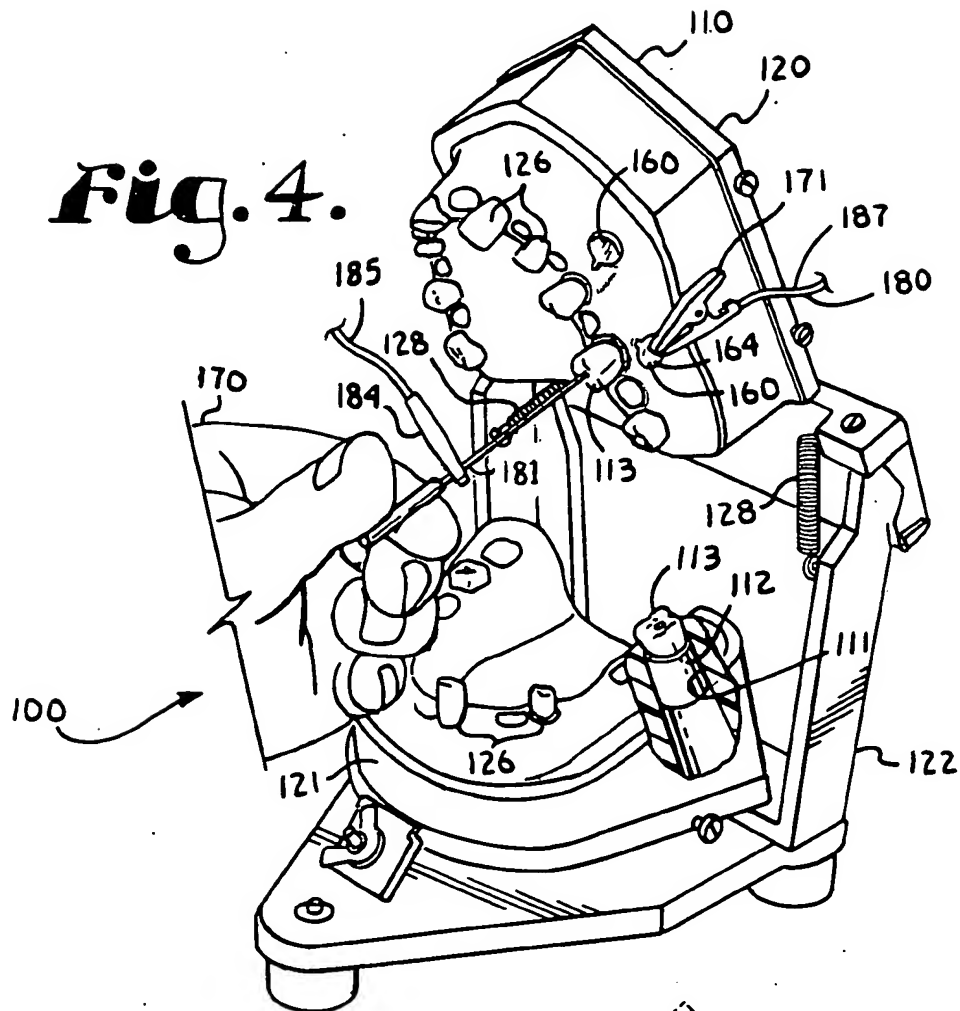


Fig. 8.

